METHOD AND APPARATUS FOR ON DEMAND VIDEO AND OTHER CONTENT RENTAL

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application claims priority to U.S. provisional application 61/010,763, filed Jan. 11, 2008 incorporated herein by reference in its entirety.

FIELD OF THE INVENTION

[0002] This invention generally relates to video on demand and more specifically to controlling use of video on demand content.

BACKGROUND

[0003] Video on demand is a well-known technology. It generally allows users to select and watch digital video content over a network, such as cable TV, as part of an interactive television system. VOD systems either stream content allowing viewing in real time or download it in which the program is brought in its entirety to a set top box in the cable television context before viewing starts. Most current video on demand systems are in the context of cable and telephone company or satellite television distribution systems. In most of these systems the user buys or selects a movie or television program and it begins to play in the television set almost immediately. Typically a payment must be made for each viewing.

[0004] Typically in the video on demand context, the commerce-related part of the transaction is similar to renting a video since viewing is strictly limited in terms of time and/or number of viewings. In some video on demand systems for instance one may watch the video as many times as one wants, but only beginning for a period of 24 hours beginning when the rental is made. Such video on demand systems are very limited in terms of user control and access and they typically require viewing to begin immediately upon purchase. This is due to the inherent limitations of the delivery system and the user's device which is typically a cable television set top box or equivalent.

SUMMARY

[0005] In accordance with this disclosure, a video on demand system is provided, not in the context of cable television, but instead in the computer network (Internet) context. It is known of course to purchase (or obtain without payment) video and audio material from a website via the Internet, which is then downloaded partially or in its entirety to the user's device typically a personal computer, or consumer electronics device such as an iPod or Apple TV device or other such device. If these are purchases the viewer then owns the content and can view it as many times as he wants indefinitely. However in the context of the system disclosed here, instead a video on demand approach is used in which the user rents use of the audio or video material for a limited time for a fixed payment and then can view the rented content at the time and place of his choosing using his consumer electronics device, such as an Apple TV or iPod device. Some such devices may require connection to the Internet via a host computer.

[0006] Hence in one embodiment, the present system supports movie rental from, for instance, the Apple iTunes Store which is a central website, providing content. Users are able to rent movies or other video material and view it on their Apple TV or iPod device. In some embodiments, the material may be transferred from one client (user) device to another. Typically upon purchase of the audio or video asset (program or movie and also referred to as content), a 30-day or other defined time period begins. The material may be viewed and/or listened to any time during that 30-day time. In addition, any time during that 30-day time when the viewer actually plays the material, a 24-hour window begins during which unlimited viewing is permitted. However once that 24-hour window has ended no more viewing is permitted. Of course these time limits are merely illustrative. In one embodiment, the present system supports both high definition television and standard definition television. In one embodiment, each individual program has its own assigned rental period both in terms of the overall time of rental such as the 30-day time span and also the 24-hour window.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. **1** shows the environment in which the present system operates.

[0008] FIG. **2** shows a flowchart showing the process of renting a movie in this example.

[0009] FIGS. **3**A-**3**E shows various timelines for renting and viewing a movie under different circumstances.

DETAILED DESCRIPTION

[0010] FIG. **1** shows the environment in which the present system operates. Most elements here are conventional and hence not explained in further detail. At the head end, there is a digital video on demand delivery service such as the iTunes Store **12** in one embodiment, more broadly a set of content and commerce servers operated by a commercial entity for storing (or accessing) a number of programs and/or movies and/or audio items such as music. This element **12** of the system is conventional since for instance such stores or more broadly content storage facilities already exist. The iTunes Stores **12** is conventionally coupled to the Internet **14**. Also connected to the Internet **14** at the user end is a client device **18** indicated here as an Apple TV device, but which might be an Apple iPod device (with its host computer) or similar consumer electronic devices or computers available from other manufacturers and which are currently available. Each such device **18** has as shown here a global universal identifier GUID **20** which identifies that particular device.

[0011] Also provided here at the head end is a conventional DRM (digital rights management) server **24**. Such servers already exist in the content of present video and audio downloads and viewing services. Digital rights management refers to the policy enforcement for protecting the content from unauthorized use. Typically this involves some form of encryption. The content is transferred from the iTunes Store **12** or other source to the client device **18** in encrypted form and must be decrypted at the client device **18**. Some such encryption schemes are sophisticated. For instance typically the encryption applied to each particular content transfer is different. Also the decryption keys supplied may be useful only for a small portion of each piece of content. In this case what is referred to as a key bag or a file is provided as part of the DRM file holding a number of keys